It is a great pleasure to share with you insights about the roles that HR can – and I believe should - play in helping organisations to harness the power of innovation to become more agile, strong and productive.

Preparing to give this talk has been an opportunity for me to integrate my 'old life with my 'new' life. Now I am a Principal Research Fellow in the Centre for Research in Innovation Management or CENTRIM, which is part of the Freeman Centre on the campus of the University of Sussex in England. In CENTRIM we undertake academic research into the managerial aspects of innovation examining issues such as organising for innovation, processes, facilitative mind-sets and skills, risk and reward and so on.

This has been my life for the past 15 years but in my old life I spent many years working in HR, mainly on the development of human capital. I was fortunate to be at the right place at the right time. Early in my career I came across the set of social technologies that were called 'organisation development' or 'OD' quite soon after they had been developed and I had the opportunity to be amongst the first to implement the principles and practices of OD in Harrods, a UK government agency and many companies that wanted to be at the cutting edge.

Hopefully, using my experience as an OD Change Agent and an Innovation Researcher, I will be able to investigate innovation from an OD perspective and suggest ways that HR people can create the conditions in which 'good' innovation can take place.

Notice that I used the expression “good” innovation. As I will explain later, not all innovation is good. Like a double-edged sword, innovation can be good (sociologists use the word functional) for a particular organisation at a particular time and other innovation can be bad, or dysfunctional. This distinction is important because we don’t want to construct organisations to promote innovation per se. We want to construct organisations that implement good or functional innovation.

I have organised this talk answer six questions. These are:

- What is innovation?
- Why should we invest energy and resources in innovation?
- Where does innovation take place in organisations?
- How is innovation generated?
- What is good and bad innovation?
- And what can HR professionals do?
WHAT IS INNOVATION?
A widely used definition of innovation is “the successful exploitation of new ideas”, where the ideas are new to the Unit of Adoption rather than new to the world. For a long time, I have liked this definition. The use of the word “exploitation” emphasised that innovation is about gaining advantage from new ideas, thereby differentiating innovation from creativity. Also, the definition has a managerial bias, since the job of the manager can be said to be to manage effectively processes of exploitation.

But two years ago, I had an experience that changed my thinking on this topic. I was undertaking a study of innovation in poor communities in Vietnam and I was taken by a proud project manager to see a road that had been constructed by a group of villagers to a few isolated houses at the top of a forested hill. All those whom I met were full of praise for the new initiative that had changed many lives. The story is this. For centuries there had been houses at the top of the hill but it required a two-hour walk up a slippery path to reach them. The top fields were fertile but could not be exploited fully. If a pig was raised at the top of the mountain it had to be put on a stretcher and carried down the path before it could be sent to market. But the villagers did not have enough money to pay for a road to be constructed.

Then came a change-agent from a UN agency. The UN paid for an engineer to plan a route for a new road and convinced 200 villagers to give six weeks of their time after harvest to dig the road by hand. This was done and the road exists. A much wider range of crops is being grown at the top of the hill and the village is more prosperous.

I recall saying to the UN change agent, “it is a great achievement but I don’t think that it is an innovation because the idea was not new”. He said to me, “well it is true that the idea of a road is not new – the people here have wanted one for generations – but what was new was finding the means to achieve their dream. The engineer’s survey, the training we provided in road construction and the organisation of the 200 villagers for six weeks were all essential and these were new.”

Of course, he was right. Innovation is not only about the exploitation of new ideas. Promising ideas can become stuck because the means of exploiting them are absent. Old ideas can become innovations if new ways can be found to release them from being stuck. Accordingly, I now define the essence of innovation as a process of transformation. It begins with hope, ideas or opportunities. It concludes with value being created. **Innovation transforms opportunities into value.**
The management challenge varies enormously. Sometimes the idea is simple but making it happen is difficult. At other times, it is the new idea that is hard to find. But the principle is clear. An idea, no matter how new or creative, is not an innovation until something that is valuable has been created.

In the case of the road in Vietnam, the value created was partly economic but not exclusively so. Those who live at the top of the hill are much better integrated into the village: there have been social benefits. Other projects run by the same UN agency bring great environmental benefits, for example by reducing deforestation. And it must not be forgotten that the villagers had had an experience of success in organising and making a difference through own efforts. Innovation is empowering.

Innovation can create value in four major ways: economically, socially, environmentally and for those involved. This is an important insight. Much of the earlier writing about innovation saw it as a process for gaining strategic differentiation and generating superior profits. Of course, it is that. But it is more. Innovation is required to address all the problems of our age, from climate change to the alleviation of poverty. We, in HRM, can help our managerial clients to gain a deeper and broader understanding of the power of innovation to change lives for the better in multiple arenas and we can confront the assumption that innovation is only as a means of achieving economic benefits. Certainly, innovation is a potential provider of strategic advantage. However, it is much more. Innovation can be targeted to create a greener world, ameliorate poverty, provide better health care, increase democratic accountability and help to achieve many other environmental and social ends. In fact, innovation is increasingly seen as being essential to realising the values embedded in the triple-bottom line approach for evaluating impact on planet, people and profit.

Organisations need lots of innovation initiatives; often many more that we expect. For example, in a study that I undertook of a prize-winning Fish and Chip Shop we found more than 30 innovations. This was not an ordinary Fish & Chip shop. It had won a national award as the Innovative Fish & Chip Shop of the Year. Many of the innovation initiatives were small – better boxes for taking the food home so it was more pleasant to eat, special portion sizes for older customers, a refrigerator for keeping the chips at the right temperature before cooking and so on. Almost none of the initiatives were deal breakers by themselves. But three things made the difference. These were (i) the quantity of innovation, (ii) the innovation initiatives were complementary in that they were aligned to deliver a distinctive and superior user experience and (iii) the innovation initiatives were
comprehensive as they addressed all of the challenges in providing a great Fish & Chip Shop experience.

We can conclude that organisations require flows of innovation that are purposeful, timely, aligned and add value faster than cost. This is the essence of the strategic innovation challenge.

WHY SHOULD WE INVEST ENERGY AND RESOURCES IN INNOVATION?
Leading scholars of innovation have concluded that “on average, innovative businesses are twice as profitable as non-innovative ones” – a fact that must put innovation on the agenda of all senior managers, including HR professionals. But notice that the researchers’ conclusion began with the words, “on average”. Not all organisations that embark on a strategy of innovation are successful, indeed more than a few have been destroyed by an attempt to be innovative.

However tough it is to get innovation right; it is essential to take it seriously. Since innovation is the generative force in organisations, it must be on management’s agenda, especially in industries that have strong change drivers, like new forms of competition, technical change, market evolution etc.

I think that there is another reason why innovation is important and it relates to the empowering benefits of being personally involved in innovation.

In the movie Cast Away Tom Hanks plays the role of a FedEx employee stranded on an uninhabited island after his plane crashes in the South Pacific. The film depicts his successful attempts to survive on the island using remnants of his plane’s cargo, as well as his eventual escape and return to society. As you watch this film you are impressed by the ingenuity and enterprise of Tom. It’s as if overcoming problems and making the most of everything are natural human qualities. Today, in many organisations, we see standardisation as being the primary route to progress. Of course, standardisation, discipline, uniformity and conformity have their place but there is a risk that they destroy our desire to be innovative, diminish our feeling that “we can make a difference” and rob us of self-respect. Not every job has room for innovation and not every person has an innovative desire but many do. We need to find ways that allow people to contributors to a better tomorrow.

WHERE DOES INNOVATION TAKE PLACE IN ORGANISATIONS?
As we explore what we mean by innovation it becomes clear that the word covers many things. A group of maintenance workers in a small factory begin to keep a chart showing which machines breakdown most often and they see, for the first time, patterns developing – for them the record keeping and the use of systematic analysis is an innovation. A mining company sets a target of reducing its carbon emissions by 20% within five years and develops the wide range of capabilities in Purchasing, R&D, monitoring, etc. to achieve this. It is embarking on an innovation journey. A group of Learning Specialists in an HR department decide to move from a management training approach that supplies training
courses based upon generic needs to an individual-driven approach where each manager becomes responsible for setting his or her learning goals. When this new paradigm to promote learning has been implemented, for that HR group, it will be an innovation.

It is helpful to identify five principle zones within an organisation within which innovation occurs. These are:

- **Strategic Innovation**
- **Functional Innovation**
- **Workplace and User Innovation**
- **Innovation from Specialists**
- **Network Innovation**

I will explain each of these briefly.

**Strategic innovation** enables strategic commitments to become strategic actualities. Let me give you an example. In 1992, Mr Toyoda, then Chairman of Toyota, insisted that the company prepare its Earth Charter, which set a goal for Toyota to produce vehicles that were far more environmentally friendly that any that were available at that time. In order to achieve this ambition a great deal of innovation would be needed. This went beyond developing and exploring alternatives technologies for supplying the power required. Potential customers had to become convinced of the importance of buying a green vehicle. Toyota's previous commitment to an evolutionary approach to making progress had to be replaced by a willingness to be bold and radical. Very tight timelines required new processes for engineering development. The organisational capabilities to achieve these ends were put in place and, just three years later, Toyota showed its concept hybrid car at the Tokyo Motor Show and the company launched the Prius in 1997. Innovation had enabled a strategic commitment to become a strategic actuality.

**Functional innovation** enables a specialist group to upgrade its contribution to the organisational system as a whole. Let me give some examples related to HRM from the current edition of the monthly magazine from the CIPD in the UK. There is an article about new methods for increasing staff engagement, an article about how Virgin has changed the way that HR communicates with employees using intuitive IT systems with greater self-service options, how Microsoft developed a new operating model that supported agility, they call it the 'hybrid future'. How the pharmaceutical company GSK is adopting ‘smart working’ where people don’t have a dedicated workspace but chose the kind of physical environment that suits the task they are undertaking. And how a group of 15 municipal
authorities have set-up a not-for-profit organisation offering shared HR services, with considerable cost savings. These and many more initiative are innovations in the sense that they are new to the Units of adoption. They enable specialist groups to upgrade their contribution to the organisational system. The same kinds of things can be seen in all other functional groups, from maintenance to finance, although the pace and impact of innovation varies.

*Workplace and User Innovation* brings about changes in what is done or how it is done driven by the insight of the people who are directly involved. Almost all of us must have had the experience of working within an organisation and doing things the so-called 'correct' way and after a while we think to ourselves: “this is stupid. It would be a lot better if...” It is not only shop-floor workers who see flaws in the current system and can think of ideas to improve it. Surgeons suggest better ways of performing delicate tasks. It is even said that Steve Jobs, when he awoke after an operation in his final illness, was fitted with an oxygen mask and, immediately, complained about the design saying, ‘there must be a better way of solving this problem’. Traditionally senior people or experts appropriated much of the authority required to make innovative changes. User innovation begins with the premise that those who are directly involved have assess to unique insights and can initiate, drive and implement innovation initiatives.

*Innovation from Specialists* that have the role of driving innovation across the organisation. Mostly they are involved in research and development but not exclusively so. People involved in systems engineering, standardisation, marketing, technology development or process control often take decisions about which new initiatives to adopt and they act as innovation gatekeepers: they decide which innovations should be adopted and which should not.

*Network Innovation* adopts a different perspective. It takes the organisation’s eco-system as the unit of analysis that includes suppliers, distributors, partners and the like. This is important because often there are many opportunities for gaining benefit from new ideas between interdependent agents in an organisation’s eco-system. Take Wal-Mart’s distribution system as an example. By the mid-1990s, their distribution costs were about 3% of goods sold, whereas their competitors 4.5% to 5%. It had taken 20 years for Wal-Mart to get there. On the way there it was realised that Wal-Mart could not do this alone. They had to co-develop innovation initiatives with suppliers, logistic firms, IT companies and so on.

These five zones demonstrate that designing an organisation to be innovative is not a simple construct. In fact, different types of organisation require different configurations. For example, science-intensive businesses like pharmaceutical companies have business units given over to R&D or discovery undertaking innovation from specialists whereas organisations like TV studios, Universities and retail stores depend more on functional and user-driven innovation. Those of us who work in HR, especially at the strategic level, can help our organisation to get the balance right.
Achieving a right balance is more important than it may seem. One of my research case examples was the New York Police Department. In the early 1990s the NYPD was losing the battle against crime. A new man, William Bratton became the chief of the New York City in 1994 and, in two years, the crime statistics showed a drop of about 30%. When Bratton arrived, he found that the NYPD had been strongly influenced by the empowerment philosophy. Senior police personnel were asked to see their role as helpers of each Beat Cop rather than bosses. Bratton reversed this policy. He considered that individual policemen and women were too inexperienced to drive a revolution in policing. In the situation the NYPD found itself, workplace innovation was too puny. So, the balance was changed and the 70 or so Precinct Commanders were given the authority to drive change. The responsibility for innovation changed to strategists, functional leaders and specialists. This helped to facilitate the many hundreds of aligned innovation initiatives that were needed.

I mentioned earlier that innovation requires achieving transformations. To be successful, this requires the imposition of several kinds of disciplines that include open-minded investigation; detailed analysis of options, validation of assumptions, building commitment amongst stakeholders, defining capabilities required, agile project management and exploitation of benefits.

HOW IS INNOVATION GENERATED?
Identifying the major zones within which innovation can occur is useful but it does not help us to understand where it comes from nor how it can be managed. This requires that we use another set of constructs: that of wellsprings and modalities.

A wellspring is a source of energy and resources. Work undertaken by Dr Parejo and myself used the concept of wellsprings. Found that sources can be direct (a firm can buy a patent from an inventor) whilst others are indirect (a firm may see a rival undertaking an initiative, reverse engineer it and develop a new product or process concept). In addition, sources many be generic (acquisition of new technologic platforms, for example) whilst others are specific. Firms can demonstrate considerable ingenuity in finding wellsprings of innovation. For example, Anita Roddick, at one time owner of a UK business called the Body Shop learnt about skin care from South American Indian women and deodorants from African women and used these formulae as the basis for an entirely new product range.

There are six major wellsprings of innovation:

- Focusing Investment
- Using Structured Processes
- Creating and Exploiting Knowledge
- Gaining Insight
- Liberating Blocked Energies
- Energising Capable People

I will define each of these briefly.
**Focusing Investment** creates momentum by allocating a budget to further a proposal or prospect. Once funds are allocated and objectives set work will be done to explore options and the progress will be monitored. It has been said that the most reliable method to drive innovation is to form an able and well-resourced team and make it their priority to make progress.

**Using Structured Processes** creates momentum by providing a logic that individuals and groups can use to break big tasks into smaller ones and have phases of review and decision-making. A structured approach is a universal tool kit. For many generations novice Doctors, Army Officers, Engineers and Police Inspectors have found that much of the basic training encourages them to adopt a structured methodology in almost every situation. A structured approach reduces individual bias, ensures rigour and provides an essential help-mate in times of difficulty.

**Creating and Exploiting Knowledge.** It has two main aspects: looking outwards for ideas, opportunities, technologies, ways of doing things and assessing what rivals are doing. Also, looking inwards to understand what could be done, how it can be organised and what are the risks and possible benefits.

**Gaining Insight** is facilitated by deepening understanding. Simply having knowledge is necessary but not sufficient. Information must be drawn from many sources: experience, knowledge, external sources and research. A blend of free-flowing creativity and highly disciplined analysis is required. The skills involved include creative thinking, identifying relevant data, collecting valid data, structuring data to make sense, identifying gaps in information and meeting them.

**Liberating Blocked Energies** enables necessary things to be done efficiently and effectively. Development of execution capability requires building on strengths and concentrating on transforming underdeveloped competences into sources of energy and capability.

**Energising Capable People** requires incorporating innovation management mindsets and skill-sets into the skill-sets of people in innovation-intensive roles. The overall purpose is the realistic empowerment and competence of managers (so they can say, “I want to and I can”) as it is important that people recognise that innovation to be essential but sometimes hard-to-manage and risk-ladened.
WHAT CAN HR PROFESSIONALS DO?
I believe that HR professionals can (and should) do five things to help their organisations.

- Clarify the mission-critical innovation requirements for the organisation.
- Be skilled in developing and aligning organisational capabilities.
- Develop the required capabilities to be innovative themselves.
- Avoid HR being an impediment to innovation.
- Become a role model of an innovation-orientated functional group.

In conclusion, I will use a phase that has been used so often that it is almost a cliché. But it is true, nevertheless. "If you are not part of the solution then you are part of the problem!"